



Attorney Docket No.: M-9066 US

# DECLARATION FOR PATENT APPLICATION AND POWER OF ATTORNEY

RECEIVED  
APR 19 2002  
TECH CENTER 1600/2900

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below adjacent to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of subject matter (process, machine, manufacture, or composition of matter, or an improvement thereof) which is claimed and for which a patent is sought by way of the application entitled

## Covalent Modification of Subtilisin Bacillus Lentus Cysteine Mutants with Enantiomerically Pure Chiral Auxiliaries causes Remarkable Changes in Activity

which (check) ☐ is attached hereto.  
☐ and is amended by the Preliminary Amendment attached hereto.  
☒ was filed on November 9, 1999 as Application Serial No. 09/436,513  
☐ and was amended on (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information, which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, § 119(a)-(d) of any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America listed below and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed:

Prior Foreign Application(s)			Priority Claimed	
Number	Country	Day/Month/Year Filed	Yes	No
N/A			<input type="checkbox"/>	<input checked="" type="checkbox"/>

I hereby claim the benefit under Title 35, United States Code, § 119(e) of any United States provisional application(s) listed below:

Provisional Application Number	Filing Date
60/107,758	November 10, 1998
60/113,061	December 21, 1998

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s) or PCT international application(s) designating the United States of America listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior application(s) in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose information, which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56, which became available between the filing date of the prior application(s) and the national or PCT international filing date of this application:

Application Serial No.	Filing Date	Status (patented, pending, abandoned)
N/A		

I hereby appoint the following practitioners to prosecute this application and to transact all business in the United States Patent and Trademark Office connected therewith:

Customer Number 24251



Please address all correspondence and telephone calls to:

Peter Seperack  
**SKJERVEN MORRILL MacPHERSON LLP**  
 25 Metro Drive, Suite 700  
 San Jose, California 95110-1349

Telephone: 408-453-9200  
 Facsimile: 408-453-7979

I declare that all statements made herein of my own knowledge are true, all statements made herein on information and belief are believed to be true, and all statements made herein are made with the knowledge that whoever, in any matter within the jurisdiction of the Patent and Trademark Office, knowingly and willfully falsifies, conceals, or covers up by any trick, scheme, or device a material fact, or makes any false, fictitious or fraudulent statements or representations, or makes or uses any false writing or document knowing the same to contain any false, fictitious or fraudulent statement or entry, shall be subject to the penalties including fine or imprisonment or both as set forth under 18 U.S.C. 1001, and that violations of this paragraph may jeopardize the validity of the application or this document, or the validity or enforceability of any patent, trademark registration, or certificate resulting therefrom.

Full name of sole (or first joint) inventor: John Bryan Jones

Inventor's Signature: JB Jones

Date: 30 January 2001

Residence: 1275 Seaforth Crescent, RR3

Post Office Address: Lakefield, Ontario  
Canada, K01 2H0

Citizenship: Canadian

Full name of sole (or second joint) inventor: Michael Dickman

Inventor's Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Residence: 209 La Verendrye Street

Post Office Address: Winnipeg, Manitoba  
Canada R2H 0B6

Citizenship: Canadian

Full name of sole (or third joint) inventor: Richard C. Lloyd

Inventor's Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Residence: 108 High Street

Post Office Address: Chesterton, Cambridge  
UK CB4 1NW

Citizenship: United Kingdom



Attorney Docket No.: M-9066 US

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Prior Foreign Application(s)			Priority Claimed	
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 25 Metro Drive, Suite 700  
 San Jose, California 95110-1349

Telephone: 408-453-9200  
 Facsimile: 408-453-7979

I declare that all statements made herein of my own knowledge are true, all statements made herein on information and belief are believed to be true, and all statements made herein are made with the knowledge that whoever, in any matter within the jurisdiction of the Patent and Trademark Office, knowingly and willfully falsifies, conceals, or covers up by any trick, scheme, or device a material fact, or makes any false, fictitious or fraudulent statements or representations, or makes or uses any false writing or document knowing the same to contain any false, fictitious or fraudulent statement or entry, shall be subject to the penalties including fine or imprisonment or both as set forth under 18 U.S.C. 1001, and that violations of this paragraph may jeopardize the validity of the application or this document, or the validity or enforceability of any patent, trademark registration, or certificate resulting therefrom.

Full name of sole (or first joint) inventor: John Bryan Jones

Inventor's Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Residence: 1275 Seaforth Crescent, RR3

Post Office Address: Lakefield, Ontario  
 Canada, K01 2H0

Citizenship: Canadian

Full name of sole (or second joint) inventor: Michael Dickman

Inventor's Signature: *Michael Dickman*

Date: JAN 29/2001

Residence: 209 La Verendrye Street

Post Office Address: Winnipeg, Manitoba  
 Canada R2H 0B6

Citizenship: Canadian

Full name of sole (or third joint) inventor: Richard C. Lloyd

Inventor's Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Residence: 108 High Street

Post Office Address: Chesterton, Cambridge  
 UK CB4 1NW

Citizenship: United Kingdom

23623-7043  
Attorney Docket No.: M-9066 US**DECLARATION FOR PATENT APPLICATION  
AND POWER OF ATTORNEY**

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Telephone: 408-453-9200  
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Full name of sole (or first joint) inventor: John Bryan Jones

Inventor's Signature: _____	Date: _____
Residence: 1275 Seaforth Crescent, RR3	
Post Office Address: Lakefield, Ontario	Citizenship: Canadian
Canada, K01 2H0	

Full name of sole (or second joint) inventor: Michael Dickman

Inventor's Signature: _____	Date: _____
Residence: 209 La Verendrye Street	
Post Office Address: Winnipeg, Manitoba	Citizenship: Canadian
Canada R2H 0B6	

Full name of sole (or third joint) inventor: Richard C. Lloyd

Inventor's Signature: <u><i>R. Lloyd</i></u>	Date: <u>4 FEBRUARY 2001</u>
Residence: 108 High Street	
Post Office Address: Chesterton, Cambridge	Citizenship: United Kingdom
UK CB4 1NW	

**STATEMENT UNDER 37 CFR 3.73(b)**

Applicant/Patent Owner: J. Bryan Jones and Michael Dickman  
Application No./Patent No.: 09/436,513  
Filed/Issue Date: November 9, 1999  
Entitled: Chemically Modified Mutant Serine Hydrolases Show  
Improved Catalytic Activity and Chiral Selectivity

**The Governing Council of the University of Toronto**

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or
2. an assignee of less than the entire right, title and interest.  
The extent (by, percentage) of its ownership interest is \_\_\_\_\_ %

in the patent application/patent identified above by virtue of either:

- A. ☐ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

OR

- B. ☒ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: J. Bryan Jones To: Genencor International and J. Bryan Jones  
The document was recorded in the United States Patent and Trademark Office at Reel 009785, Frames 0991-0994, on February 26, 1999;
2. From: Michael Dickman and J. Bryan Jones To: Genencor International, Inc. and J. Bryan Jones  
The document was recorded in the United States Patent and Trademark Office at Reel 009914, Frames 0650-0653 on April 27, 1999 and said Assignment having been corrected to correct the spelling of the Receiving Party, said correction recorded as of August 30, 1999 at Reel 010289, Frames 0422-0428;

☒ Additional documents in the chain of title are listed on a supplemental sheet.

☒ Copies of assignments or other documents in the chain of title are attached.

[NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned, whose title is supplied below is authorized to act on behalf of the assignee.

March 27, 2002  
Date

Peter B. Munsche  
Peter B. Munsche,  
Assistant Vice President,  
Technology Transfer, University of Toronto

Three additional documents in the chain of title are listed below:

3. Amended and Restated Assignment from Genencor International, Inc. to The Governing Council of the University of Toronto;
4. Amended and Restated Assignment from J. Bryan Jones to The Governing Council of the University of Toronto; and
5. Assignment from Richard C. Lloyd to The Governing Council of the University of Toronto.



COPY

FORM PTO-1595

# RECORDATION FORM COVER SHEET PATENTS ONLY

U.S. Department of Commerce

Patent and Trademark Office

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof:

## 1. Name and address of conveying party(ies):

Name: Genencor International, Inc.  
 Address: 4 Cambridge Place  
1870 South Winton Road  
Rochester, New York 14618

☐ Individual ☐ Association  
☐ General Partnership ☐ Limited Partnership  
☒ Corporation ☐ Other:

Additional name(s) of conveying party(ies) attached?

☒ Yes ☐ No

## 2. Name and address of receiving party(ies):

Name: The Governing Council of the University of Toronto  
 Address: 27 King's College Circle  
Toronto, Ontario  
Canada M5S 1A1

Additional name(s) of receiving party(ies) attached?

☐ Yes ☒ No

## 3. Nature of Conveyance:

☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name ☐ Other:

Execution Date: February 8, 2002, February 14, 2002, March 14, 2002, and March 5, 2002

## 4. Application Number(s) or Patent Number(s)

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application Number(s): 09/436,513Additional numbers attached? ☐ Yes ☒ No

B. Patent Number(s): \_\_\_\_\_

Additional numbers attached? ☐ Yes ☒ No

## 5. Name and address of party to whom correspondence concerning this document should be mailed:

Name: Michael J. Shuster, Ph.D.  
 Address: McCutchen, Doyle, Brown & Enersen, LLP  
Three Embarcadero Center, 18<sup>th</sup> Floor  
San Francisco, California 94111

6. Total number of applications and patents involved: -1-7. Total fee (37 C.F.R. § 3.41)(\$40.00 per assignment): \$40.00☐ Enclosed☒ Authorized to be charged to Deposit Account No. 50-1193.☒ The Commissioner is authorized to charge underpayment of any fees or credit any overpayment to Deposit Account No. 50-1193.

DO NOT USE THIS SPACE

## 9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Michael J. Shuster, Ph.D., Reg. No. 41,310

Name

Registration Number

Signature

April 3, 2002

3

Total number of pages including cover sheet, attachments and document: 12

Mail documents to be recorded with required cover sheet information to:  
 Commissioner of Patents and Trademarks, Box Assignments, Washington, D.C. 20231

Additional Conveying Parties from page 1

J. Bryan Jones  
1275 Seaforth Crescent  
Lakefield Ontario  
Canada K0L 2H0

Richard C. Lloyd  
108 High Street  
Chesterton, Cambridge  
United Kingdom, CB4 1NW

☒ Individuals                      ☐ Association  
☐ General Partnership      ☐ Limited Partnership  
☐ Corporation      ☐ Other:

COPY

**AMENDED AND RESTATED ASSIGNMENT**

Whereas the parties to this assignment acknowledge that the language of their original assignment agreement was not reflective of the parties' original intentions, whereas the parties intend to amend, restate, and supercede their prior assignment, and whereas the parties acknowledge that this Amended and Restated Assignment document is intended to reflect, clarify and correctly state the parties' original intentions, with respect to the invention described below, the parties agree as follows:

For good and valuable consideration, receipt of which is hereby acknowledged, Genencor International Inc., a Delaware corporation, having a place of business at 4 Cambridge Place, 1870 South Winton Road, Rochester, New York, having acquired by prior assignments from application 60/107,758 recorded, along with a correction to the address of the Receiving Party, as of February 26, 1999 at Reel 009785, Frames 0991-0994 and from application 60/113,061 recorded as of April 27, 1999 at Reel 009914, Frames 0650-0653, said assignment having been corrected to correct the spelling of the Receiving Party, said correction recorded as of August 30, 1999 at Reel 010289, Frames 0422-0428 a right, title and interest in an invention of J. Bryan Jones and Michael Dickman entitled:

**CHEMICALLY MODIFIED MUTANT SERINE HYDROLASES SHOW IMPROVED CATALYTIC  
ACTIVITY AND CHIRAL SELECTIVITY**

for which a United States patent application has been executed and filed on November 9, 1999, and which application now has Serial No. 09/436,513, and having acquired a right, title and interest in all patent applications and patents of every country for said invention, including divisions, reissues, continuations and extensions thereof, and all rights of priority resulting from the filing of said applications, and having acquired the right to apply for patents of foreign countries for said invention, and to claim all rights of priority without further authorization from J. Bryan Jones and Michael Dickman.

⊗

Now, the parties agree to amend, restate and supercede in their entirety the prior assignments, and in view of the above premises and effective as of the execution dates of those prior assignments, Genencor International Inc. hereby sells, assigns and transfers to the Governing Council of the University of Toronto, its successors and assigns, the right, title and interest it acquired by virtue of the above-referenced assignment recorded, along with a correction to the address of the Receiving Party, as of February 26, 1999 at Reel 009785, Frames 0991-0994 from application 60/107,758 from J. Bryan Jones, and by virtue of the assignment recorded as of April 27, 1999 at Reel 009914, Frames 0650-0653, said assignment having been corrected to correct the spelling of the Receiving Party, said correction recorded as of August 30, 1999 at Reel 010289, Frames 0422-0428 from application 60/113,061 from J. Bryan Jones and by Michael Dickman as inventors, throughout the world in said invention of J. Bryan Jones and Michael Dickman entitled:

**CHEMICALLY MODIFIED MUTANT SERINE HYDROLASES SHOW IMPROVED CATALYTIC  
ACTIVITY AND CHIRAL SELECTIVITY**

for which a United States patent application has been executed and filed on November 9, 1999, and which application now has Serial No. 09/436,513, and in all patent applications and patents of every country for said invention, including divisions, reissues, continuations and extensions thereof, and all rights of priority resulting from the filing of said applications; the Governing Council of the University of Toronto authorizes Genencor International Inc., as licensee, to apply for patents of foreign countries for said invention, and to claim all rights of priority without further authorization from the Governing Council of the University of Toronto, and agrees to execute all papers useful in connection with said United States and foreign applications, and generally to do everything possible to aid Genencor International Inc., its successors, assigns and nominees, at its request and expense, in obtaining and enforcing patents for said invention in all countries.

/ / /

Executed this 14 day of March, 2002.

By: Margaret A. Her

Title: MARGARET A. HORN  
VICE PRESIDENT B

State of \_\_\_\_\_ )  
 ) ss.  
 County of \_\_\_\_\_ )

Executed this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

State of \_\_\_\_\_ )  
 ) ss.  
 County of \_\_\_\_\_ )

⊗

Genencor International Inc. warrants, covenants and represents that it has not heretofore granted any license, right or privilege with respect to said application, invention or improvements, or in any way encumbered the same, and that it has the full right to make this assignment.

Executed this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

By: \_\_\_\_\_

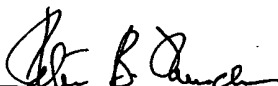
Title: \_\_\_\_\_

State of \_\_\_\_\_ )

) ss.

County of \_\_\_\_\_ )

Executed this 14 day of February, 2002.

By: 

Peter B. Munsche  
Assistant Vice-President  
Technology Transfer  
University of Toronto

Title: \_\_\_\_\_

~~State~~ of Province Ontario )

) ss.

County of Canada )

**AMENDED AND RESTATED ASSIGNMENT**

Whereas the parties to this assignment acknowledge that the language of their original assignment agreement was not reflective of the parties' original intentions, whereas the parties intend to amend, restate, and supercede their prior assignment, and whereas the parties acknowledge that this Amended and Restated Assignment document is intended to reflect, clarify and correctly state the parties' original intentions, with respect to the invention described below, the parties agree as follows:

For good and valuable consideration, receipt of which is hereby acknowledged, J. Bryan Jones, a citizen of Canada, residing at 1275 Seaforth Crescent, RR3 Lakefield, Ontario Canada K0L 2H0, having acquired by prior assignment from application 60/107,758 which assignment was recorded, along with a correction to the address of the Receiving Party, as of February 26, 1999 at Reel 009785, Frames 0991-0994 and from application 60/113,061 which assignment was recorded as of April 27, 1999 at Reel 009914, Frames 0650-0653 and said assignment having been corrected to correct the spelling of the Receiving Party, said correction recorded as of August 30, 1999 at Reel 010289, Frames 0422-0428 a right, title and interest in an invention of J. Bryan Jones and Michael Dickman entitled:

**CHEMICALLY MODIFIED MUTANT SERINE HYDROLASES SHOW IMPROVED CATALYTIC ACTIVITY AND CHIRAL SELECTIVITY**

for which a United States patent application has been executed and filed on November 9, 1999, and which application now has Serial No. 09/436,513, and having acquired a right, title and interest in all patent applications and patents of every country for said invention, including divisions, reissues, continuations and extensions thereof, and all rights of priority resulting from the filing of said applications, and having acquired the right to apply for patents of foreign countries for said invention, and to claim all rights of priority without further authorization from J. Bryan Jones and Michael Dickman.

Now, the parties agree to amend, restate and supercede in their entirety the prior assignments, and in view of the above premises and effective as of the execution dates of those prior assignments, J. Bryan Jones hereby sells, assigns and transfers to the Governing Council of the University of Toronto, its successors and assigns, the right, title and interest he



acquired by virtue of the above-referenced assignment recorded, along with a correction to the address of the Receiving Party, as of February 26, 1999 at Reel 009785, Frames 0991-0994 from application 60/107,758 and J. Bryan Jones hereby sells, assigns and transfers to the Governing Council of the University of Toronto, its successors and assigns, the right, title and interest he acquired by virtue of the above-referenced assignment recorded as of April 27, 1999 at Reel 009914, Frames 0650-0653, said assignment having been corrected to correct the spelling of the Receiving Party, said correction recorded as of August 30, 1999 at Reel 010289, Frames 0422-0428 from application 60/113,061 from J. Bryan Jones and Michael Dickman as inventors, throughout the world in said invention entitled:

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///



J. Bryan Jones warrants, covenants and represents that he has not heretofore granted any license, right or privilege with respect to said application, invention or improvements, or in any way encumbered the same, and that he has the full right to make this assignment.

Executed this 8 day of February, 2002

By: JB Jones

Title: \_\_\_\_\_

State of Ontario, Canada

) ss.

County of \_\_\_\_\_ )

Executed this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

By: \_\_\_\_\_

Title: \_\_\_\_\_

State of \_\_\_\_\_ )

) ss.

County of \_\_\_\_\_ )

⊗

Attorney Docket No.: 23623-7043

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By: \_\_\_\_\_

Title: \_\_\_\_\_

State of \_\_\_\_\_ )  
County of \_\_\_\_\_ ) ss.

Executed this 14 day of February, 2002.

By: Peter B. Munsche

Title: \_\_\_\_\_

Province of Ontario )  
State of Canada ) ss.  
County of \_\_\_\_\_ )

Peter B. Munsche  
Assistant Vice-President  
Technology Transfer  
University of Toronto

## ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, I, the undersigned, inventor:

**Richard C. Lloyd**

Who has created a certain invention for which an application for United States Letters Patent entitled **Chemically Modified Mutant Serine Hydrolases Show Improved Catalytic Activity and Chiral Selectivity** has been executed and

- ☐ is filed herewith;
- ☒ was filed in the U.S. Patent and Trademark Office on **November 9, 1999** and assigned Serial Number **09/436,513**;

Does hereby sell, assign and transfer to **The Governing Council of the University of Toronto, a corporation continued by the provisions of subsection 2(1) of the University of Toronto Act, S.O. 1971, c. 56 (as amended by S.O. 1978, c. 88)**, having a place of business at **27 King's College Circle, Toronto, Ontario, Canada M5S 1A1**, its successors, assigns, and legal representatives, the full and exclusive right to said invention and said application and to any and all inventions described in said application for the United States, its territorial possessions and all foreign countries, and the entire right, title and interest in and to any and all Letters Patent which may be granted therefore in the United States, its territorial possessions and all foreign countries; and in and to any and all continuations-in-part, continuations, divisions, substitutes, reissues, extensions thereof, and all other applications for Letters Patent relating thereto which have been or shall be filed in the United States, its territorial possession and/or any foreign countries, and all rights, together with all priority rights, under any of the international conventions, unions, agreements, acts, and treaties, including all future conventions, unions, agreements, acts, and treaties;

Agrees that **The Governing Council of the University of Toronto**, hereinafter referred to as Assignee, may apply for and receive Letters Patent for said invention and said inventions, hereinafter referred to as said invention, in its own name, in the United States, its territorial possessions, and all foreign countries; and that, when requested to carry out in good faith the intent and purpose of this assignment, at the expense of said Assignee, its successors, assigns and legal representatives, the undersigned will execute all continuations-in-part, continuations, divisions, substitutes, reissues, extensions thereof, execute all rightful oaths, assignments, powers of attorney and other papers, testify in any legal or quasi legal proceedings; communicate to said Assignee, its successors, assigns or legal representatives all facts known to the undersigned relating to said invention and the history thereof; and generally do everything possible which said Assignee, its successors, assigns, or legal representatives shall consider desirable for aiding in securing, maintaining and enforcing proper patent protection for said invention and for vesting title to said invention and all applications for patents on said invention in said Assignee, successors, assigns, or legal representatives;

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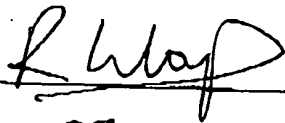
The terms "Application" and Application for Letters Patent" as used herein include both provisional and non-provisional applications;

Inventor hereby authorizes the above-mentioned Assignee or its legal representative to insert in this instrument the filing date and serial number of said Application or any other information that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document; and

Covenants with said Assignee, its successors, assigns, or legal representatives that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same has herein expressed is possessed by the undersigned.

IN THE TESTIMONY WHEREOF I have hereunto set my signature on the date indicated below.

**RICHARD C. LLOYD**



Date: 05 MARCH 2002